## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## 5 Listing of Claims:

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- Claim 1 (currently amended): A fingerprint sensor for sensing a fingerprint, the fingerprint sensor comprising:
  - a detecting and processing circuit; and
  - a plurality of sensing units, each of the sensing units comprising:
- a switch element comprising a first terminal, a second terminal, and a third terminal, the first terminal is connected to a switch terminal, the third terminal is connected to the detecting and processing circuit, and the switch element is turned on/off by the switch terminal;
  - a first resistor having a first terminal connected to the second terminal of the switch element, a fingerprint influenced\_intensity of light illuminating the first resistor so that resistance of the first resistor and a voltage level of the second terminal of the switch element change; and
    - a second resistor having a first terminal connected to the second terminal of the switch element and the resistance of the second resistor is fixed;
  - wherein when the switch elements are turned on, the detecting and processing circuit analyzes the fingerprint according to the voltage levels of the second terminals of the plurality switch elements.
- Claim 2 (currently amended): The fingerprint sensor of claim 1 wherein each of the sensing units has a second terminal of the first resistor

connected to a first predetermined reference voltage and has a second terminal of the second resistor connected to a second predetermined reference voltage, the voltage level of the first reference voltage differing from the voltage level of the second reference voltage.

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- Claim 3 (original): The fingerprint sensor of claim 1 wherein each of the switch elements is a transistor.
- Claim 4 (original): The fingerprint sensor of claim 1 wherein the first resistor is manufactured from amorphous silicon.
  - Claim 5 (currently amended): The fingerprint sensor of claim 1 wherein the second resistor is manufactured from indium tin oxide.